WAYNE INTERIM STORAGE SITE

NEW JERSEY

EPA ID# NJ1891837980



EPA REGION 2

CONGRESSIONAL DIST. 08

Passaic County Wayne Township

Other Names: WISS W.R. Grace & Co.

Site Description -

From 1948 until 1971, site operators extracted thorium and rare earths from monazite ore at the 6 ½-acre W.R. Grace & Co. facility in Wayne Township. In 1971, W.R. Grace ceased processing monazite ore and amended its Nuclear Regulatory Commission (NRC) license to cover only the storage of radioactive materials. The company decontaminated the property (burying much of the material) in 1974 to the then-established criteria. In 1975, the NRC released the land for unrestricted use, provided that the deed indicate the presence of radioactive material under the facility's surface.

In 1980, the State conducted an aerial survey that showed elevated radiation levels at the plant site, an adjacent school bus maintenance facility, a township park, the banks of Sheffield Brook, and the Pompton Plains railroad spur. Much of the off-site contamination was spread by runoff and water discharges from the site. Additional surveys were conducted in 1982 and 1983. Based on this information, the Wayne Site was placed on the National Priorities List in 1984. From 1985 through 1987, the U.S. Department of Energy (DOE), acting under its authority through the 1984 Energy and Water Appropriations Act (PL 98-50) which specifically addressed the Wayne Site, investigated and removed radioactively contaminated soils from the school bus maintenance facility, township park, and the banks of Sheffield Brook and stockpiled them at the W.R. Grace & Co. facility. This facility, now known as the Wayne Interim Storage Site (WISS), was acquired by the federal government for this purpose. Radioactive process wastes, process equipment, and building rubble were buried beneath the WISS.

The Energy and Water Appropriations Act of 1998 (PL 105-62) provided appropriations for the U.S. Army Corps of Engineers (USACE) to administer and execute the DOE's "Formerly Utilized Sites Remedial Action Program" (FUSRAP). The purpose of the FUSRAP program was to cleanup contaminated sites where work was performed as part of the Nation's early atomic energy program. Because environmental concerns at the Wayne site were similar to those of FUSRAP sites, DOE had assigned the site to FUSRAP. Responsibility for cleanup of the Wayne site transferred from DOE to the USACE in October, 1997.

An active agricultural area is located within 200 feet of the site, and there are homes located to the east and along Sheffield Brook. Many commercial businesses lie within 3 miles of the site. Residents within 3 miles of the site rely on groundwater for drinking, household, and irrigation purposes. The municipal well system serves 51,000 people, and the nearest well is 3,200 feet from the site. Local surface water is used for recreation. Information from the Remedial Investigation suggests the site is not adversely affecting groundwater in the area.

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Site Responsibility: This site is being addressed by the U.S. Army Corps of Engineers (USACE) through Federal actions, with EPA oversight.

NPL LISTING HISTORY

Proposed Date: 09/01/83 Final Date: 09/01/84

Threats and Contaminants



The contaminants identified at the WISS are radioactive particles in the thorium and uranium decay series as well as various metals and organics which were part of previous industrial processes at the site. The cleanup and stockpiling of waste has substantially decreased the health risk to the surrounding community. Radionuclide contamination in soil and sediment which was a concern at the Pompton Plains railroad spur was remediated in summer, 1993.

Cleanup Approach

The site is being addressed in two stages: Removal actions by DOE and the USACE which reduced immediate health risks and a long-term remedial phase focusing on cleanup of the remainder of the site including the buried waste at the WISS. The investigation and cleanup are being conducted in accordance with an Interagency Agreement signed by DOE and EPA in 1990.

Response Action Status _____



Initial Actions: Cleanup activities began in 1985 under the DOE's "Formerly Utilized Sites Remedial Action Program" (FUSRAP). The DOE excavated and contained (stockpiled at the interim storage site) about 38,500 cubic yards of contaminated soil

from all areas except the railroad spur area. Another 70,000 cubic yards of contaminated wastes exist below-grade at the site. The USACE is continuing to maintain and monitor the site and is complying with State permit requirements. In late summer, 1993 DOE conducted another removal action to cleanup contaminated soil at the Pompton Plains railroad spur (where monazite sand ores were offloaded prior to processing at the Wayne site) and adjacent residential properties.

Entire Site: In late 1989, the DOE began an intensive study of remaining contamination at and around the Site. The objective of this investigation was to determine the nature and extent of remaining contamination, and provide information necessary to

develop recommendations for cleanup of any residual contamination as well as final disposition of waste in the WISS and buried beneath it. As part of the remedial investigation, the DOE sampled the storage pile, the railroad spur area, and the material buried on site below the storage pile. Field work was completed in December, 1991 and an investigation report was finalized October, 1993. A feasibility study and proposed plan evaluating cleanup alternatives were released to the public in June, 1999. The Record of Decision identifying "Excavation to Residential Use and Disposal" was signed on May 15, 2000.

Environmental Progress



Removal actions at the railroad spur were completed in 1993. Waste from this action was transported offsite to a commercial disposal facility. Because of community opposition, a soil washing pilot-scale study that DOE was planning to conduct at the site in late summer, 1994, did not take place. Operational studies of soil washing equipment, using clean soils, began in May 1995 and were conducted in Oak Ridge, Tennessee.

In July, 1995, DOE released a final Engineering Evaluation/Cost Analysis for a non-time critical removal of the interim storage pile. The waste storage pile contained contaminated soils and materials generated during previous removal actions. Pile removal activities began in the fall of 1995. Removal of the soils to the permanent disposal facility (Envirocare, Utah) was completed in 1997. In November, 1997 the USACE issued an Engineering Evaluation/Cost Analysis to remove an additional 40,000 cy of subsurface contamination. This removal was completed in winter, 1999. The remaining subsurface contamination and onsite building was addressed through the Record of Decision. On May 15, 2000 the Record of Decision was signed for the remaining work at the site. Key components of the selected remedy includes excavation of contaminated soil and debris to unrestricted use cleanup levels in addition to decontamination and demolition of the onsite building.

To date, the onsite building has been demolished and removal of the contaminated subsurface soils and debris has been completed. Groundwater monitoring will be conducted over the next five years to verify that the aquifer has not been adversely impacted. The site is currently being restored (e.g., cleanbackfill, grading and reseeding).

Site Repositories

Wayne Public Library, 475 Valley Road, Wayne, New Jersey